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(54) **System and method for supporting distributed computing mechanisms in a local area network server environment**

(57) LAN server machines are configured to utilize their existing mechanisms to pass generic security subsystem (GSS) distributed computing environment (DCE) credentials. The server management block (SMB) protocol is extended to facilitate exchange of such credentials wherein the server utilizes the GSS API interface to obtain and validate such credentials. The GSS interface provides tokens which encapsulate all necessary information to perform mutual authentication between the client and server.

A new protocol level is defined with respect to such SMB protocol extensions which includes a new protocol name exchanged in the negotiate protocol (NP) SMB. Pre-existing LAN servers will turn on a bit in the SMB_Secmode field in the NP response indicating that the server supports exchange of secpkgX SMB. The server will then wait for an SMB secpkgX or SMB sess-setupX response. The former response will permit the user/client and server to exchange GSS tokens utilizing a conventional LAN server mechanism and to thereby and mutually authenticate.
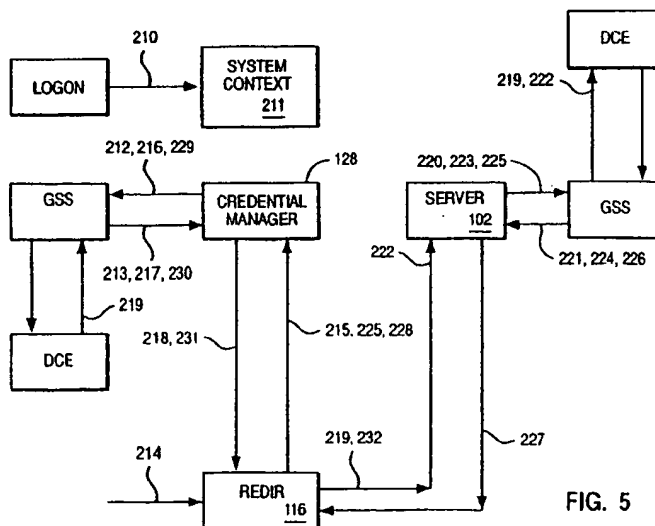
FIG. 5

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